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| 10/550,306 | 09/22/2005 | Kiyotaka Nakabayashi | 277053US6PCT | 1134 |

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| EXAMINER |
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MISLEH, JUSTIN P

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| ART UNIT | PAPER NUMBER |
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2622

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06/02/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/550,306 | Applicant(s) NAKABAYASHI, KIYOTAKA | |
| | Examiner JUSTIN P. MISLEH | Art Unit 2622 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 - 10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because it exceeds one page in length. Correction is required. See MPEP § 608.01(b).
2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Drawings

3. Figures 7 – 9D should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign mentioned in the description: 100A (page 2) is missing from figure 7. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted

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after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Information Disclosure Statement

5. The listing of references in the specification is not a proper information disclosure statement (see page 1, lines 24 and 25). 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, “the list may not be incorporated into the specification but must be submitted in a separate paper.” Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1, 3 – 6, and 8 – 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant’s Conceded Prior Art (ACPA) in view of Yamashita et al. (US 5,384,601).

The Examiner considers Applicant's Conceded Prior Art to be described in the specification starting on page 7 (line 11) and concluding page 6 (line 21) and shown in figures 7 – 9D. These sections will be relied upon in the following rejections.

The Examiner notes apparatus Claim 5 fully encompasses the language of apparatus Claim 1. Furthermore, the Examiner notes Claims 1 and 10 are corresponding apparatus and method claims, respectively. For these reasons, Claims 1, 5, and 10 will be rejected together using the language of Claim 5.

8. For **Claims 1, 5, and 10**, ACPA discloses, as shown in figures 7 – 9D, an imaging apparatus comprising:

shooting mode selection means (120A) for selecting desired shooting mode information from pieces of set shooting mode information, each of the pieces of shooting mode information including information concerning a specific color determined depending on a predetermined shooting condition (see page 3, lines 2 – 8);

specific color extraction means (106A) for extracting video signals of a specific color from video signals (R,G,B) on the basis of the shooting mode information selected by the shooting mode selection means (see page 3, line 25 – page 4, line 6);

color difference detection means (109A) for detecting color difference data of the *video signals*;

correction reference data storage means (“table data”) for storing pieces of correction reference data, serving as references for correcting the specific color to a predetermined color (see page 4, line 25 – page 5, lines 18);

color correction value calculation means (130A) for selecting correction reference data corresponding to the specific color from the correction reference data storage means (“table data”) on the basis of the shooting mode information selected by the shooting mode selection means (120A) to calculate color correction values on the basis of the selected correction reference data, the color correction values being used to correct the specific color to the predetermined color (see page 4, line 25 – page 5, line 18); and

color correction means (110A) for correcting the specific color in the video signals to the predetermined color on the basis of the color correction values calculated by the color correction value calculation means (see page 5, line 25 – page 6, line 21).

However, ACPA prior art is silent with respect to a color difference detection means for detecting color difference data of the specific color from the specific-color video signals extracted by the specific color extraction means and calculating the color correction values on the additional basis of the color difference data of the specific color detected by the color difference detection means. Furthermore, ACPA does not disclose a luminance correction means for correcting the luminance level of the video signals depending on the luminance level of the specific-color video signals extracted by the specific color extraction means.

On other hand, Yamashita et al. also disclose imaging apparatus for correcting color signals. More specifically, Yamashita et al. teach, as shown in figure 1, a correcting color portion of an imaging apparatus, including a color space converter (1) for generating color difference signals of input video signals, an area setting device (4) for extracting a specific color from the color difference signals, a weighting coefficient setting device (6) for establishing a correction weighting for each color in the specific color range extracted, a luminance value

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setting device (3), and a calculator (7 and 8) for calculating correction values for the original color difference signals on the basis of the color difference signals for the specific color (see figures 3a, 3b, and 4 and column 5, line 16 – column 6, line 68 for support). Moreover, Yamashita et al. specifically teach, as shown in figure 1, a luminance correction means (3 and 8) for correcting the luminance level of the video signals depending on the luminance level of the specific-color video signals extracted by the specific color extraction means (see column 5, line 57 – column 6, line 16).

Therefore, Yamashita et al. teach a color difference detection means for detecting color difference data of the specific color from the specific-color video signals extracted by the specific color extraction means and calculating the color correction values on the additional basis of the color difference data of the specific color detected by the color difference detection means and a luminance correction means for correcting the luminance level of the video signals depending on the luminance level of the specific-color video signals extracted by the specific color extraction means, as claimed.

According to Yamashita et al., an advantage of the invention is to provide: a color adjustment apparatus with “a simple circuit construction and high processing speed enabling real-time processing of an input video signal” (see column 2, line 67 - column 3, line 3), and a color adjustment apparatus that can “automatically and correctly shift the reference chromaticity value and the reference luminance value irrespective of the offset direction of the input chromaticity signal to the reference chromaticity value, and the degree of this shift can be determined freely by the weighting coefficient setting means” (see column 4, lines 13 – 21).

Therefore, the Examiner submits, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to have incorporated the color processing apparatus, including the color difference detection means, the luminance correction means, and calculating the color correction values on the additional basis of the color difference data of the specific color detected by the color difference detection means, as taught by Yamashita et al. in the imaging apparatus disclosed by ACPA.

9. As for **Claims 3 and 8**, ACPA discloses, as shown in figure 7, wherein the correction reference data storage means is a table memory. The Examiner submits a “table memory” has a function capable of changing the stored correction reference data.

10. As for **Claims 4 and 9**, ACPA further discloses, as stated on page 3 (lines 2 – 8), wherein the shooting mode selection means (120A) has a function of automatically selecting the shooting mode information depending on a shooting environment.

11. As for **Claim 6**, Yamashita et al. further teach, as shown in figures 1 and 6, wherein the luminance correction means (3 and 8) has a function of calculating the ratio of the specific-color video signals to the video signals to correct the luminance level of the specific-color video signals in accordance with the calculated ratio (see column 7, line 64 – column 8, line 35).

12. **Claims 2 and 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant’s Conceded Prior Art (ACPA) in view of Yamashita et al. (US 5,384,601), as applied to Claims 1 and 5 above, in further view of Sakamoto (US 6,332,036 B1).

13. As for **Claims 2 and 7**, neither ACPA nor Yamashita et al. further teach wherein the specific color extraction means has a function of changing an extraction range of the specific-color video signals depending on the luminance level of the video signals.

On the other hand, Sakamoto also disclose an apparatus and method for color extraction. More specifically, Sakamoto teach, as shown in figures 1, 2, and 4, where the color extraction apparatus includes the color tables management block (13) that searches tables based on the input luminance signal and outputs to the color area comparison block (14), an area signal indicating reference color areas that are assumed for the eight colors when the input luminance signal is input (see column 4, lines 14 – 19). Therefore, Sakamoto teaches wherein the specific color extraction means has a function of changing an extraction range of the specific-color video signals depending on the luminance level of the video signals.

According to Sakamoto, an advantage of the present invention is to “provide a color extraction apparatus and method which can not only reduce the load of a signal processing means for image processing but also increase the extendability of a color model to thereby enable high-speed, simultaneous extraction of multiple colors by using a more flexible model” (see column 1, lines 42 – 47).

Thus, the Examiner submits, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to have included wherein the specific color extraction means has a function of changing an extraction range of the specific-color video signals depending on the luminance level of the video signals as taught by Sakamoto in the imaging apparatus taught in-combination by ACPA in view of Yamashita et al.

Cited Prior Art

14. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure for the following reasons:

- **Inoue (US 6,571,010 B1)** discloses a color conversion method and apparatus utilizing an efficient color conversion table memory.
- **Yumiba et al. (US 5,289,295)** discloses a color adjustment apparatus with a color space conversion circuit operating a rectangular coordinate system.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 571.272.7313. The Examiner can normally be reached on Monday through Friday from 8:00 AM to 5:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Lin Ye can be reached on 571.272.7372. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**/Justin P. Misleh/
Examiner, Art Unit 2622
May 30, 2008**